

CLAIMS:

1. In a printing press, an adjustment system for positioning a rolling element relative to a first cylinder having a first outer diameter and relative to at least a second cylinder adapted to replace the first cylinder and having a second outer diameter different than the first outer diameter, the adjustment system comprising:

an actuating member operable to displace the rolling element relative to the first cylinder, the actuating member having first and second ends, the first end being pivotally connected to a frame of the printing press and the second end being mechanically linked to the rolling element, the actuating member providing sufficient displacement to bring the rolling element into contact with the first cylinder such that a predetermined contact pressure therebetween is reached; and

the actuating member also being operable to bring the rolling element into contact with the second cylinder such that the predetermined contact pressure therebetween is reached.

2. The adjustment system according to claim 1, wherein the actuating member includes first and second independently controllable adjustment mechanisms, the first adjustment mechanism providing the sufficient displacement to bring the rolling element into contact with one of the first and second cylinders, while the second adjustment mechanism maintains a part of the actuating member at a predetermined

length such that the predetermined contact pressure is reached, the second adjustment mechanism being operable to retract the part of the actuating member from the predetermined length such as to temporarily disengage the rolling element from the one of the first and second cylinders, the second adjustment mechanism being operable to return the part of the actuating member to the predetermined length to re-engage the rolling element with the one of the first and second cylinders, thereby re-establishing the predetermined contact pressure therebetween without operating the first adjustment mechanism.

3. The adjustment system according to claim 1, wherein the rolling element is a form roller and the first and second cylinders are plate cylinders, the form roller being adapted to distribute at least one of ink and dampening fluid to the first and second plate cylinders.
4. The adjustment system according to claim 1, wherein the rolling element is an impression cylinder and the first and second cylinders are blanket cylinders.
5. The adjustment system according to claim 1, wherein the actuating member is mechanically linked to the rolling element through a link member connected to the second end, the link member rotatably retaining the first roller and being pivotable about a fixed pivot.
6. The adjustment system according to claim 5, wherein the rolling element is a form roller and the fixed

pivot is located at a central axis of a transfer roller in continuous contact with the form roller.

7. The adjustment system according to claim 2, wherein the first and second adjustment mechanisms respectively include first and second actuators.
8. The adjustment system according to claim 7, wherein the first and second actuators are fluid driven.
9. The adjustment system according to claim 2, further comprising locking means to lock the first adjustment mechanism after the desired contact pressure is reached.
10. The adjustment system according to claim 2, wherein the predetermined length is the maximal length of the second adjustment mechanism.
11. The adjustment system according to claim 2, further comprising locking means to lock the second adjustment mechanism at the predetermined length.
12. A method for displacing a rolling element relative to at least a cylinder in a printing press, the rolling element being mechanically linked to an adjustment system composed of first and second independently controllable adjustment mechanisms, the method comprising the steps of:

setting the first adjustment mechanism to a predetermined length so that a total length of the adjustment system is such that the rolling element is out of contact with the cylinder; and

extending the second adjustment mechanism such as to bring the rolling element in contact with the cylinder until a desired contact pressure therebetween is reached.

13. The method according to claim 12, further comprising locking the second adjustment mechanism once the desired contact pressure is reached.
14. The method according to claim 13, further comprising retracting the first adjustment mechanism so that the contact between the rolling element and the cylinder is broken.
15. The method according to claim 14, wherein after the contact between the rolling element and the cylinder is broken, a step of extending the first adjustment mechanism to the predetermined length is performed so that the rolling element is brought back in contact with the cylinder with the desired contact pressure therebetween.
16. An offset printing press including at least a first cylinder and a rolling element mounted in a frame structure in serial contactable engagement, the printing press comprising an adjustment mechanism operable to displace the rolling element between a predetermined printing position, wherein the rolling element and the first cylinder are in contacting engagement, and a disengaged position, wherein the rolling element is removed from contacting engagement with the first cylinder, the adjustment mechanism being selectively actuable and providing controlled

variable displacement of the rolling element relative to the first cylinder.

17. The offset printing press as defined in claim 16, wherein the rolling element is an impression cylinder and the first cylinder is a blanket cylinder.
18. The offset printing press as defined in claim 16, wherein the rolling element is a form roller and the first cylinder is a plate cylinder, the form roller being adapted to distribute at least one of ink and dampening fluid to the plate cylinder.
19. The offset printing press as defined in claim 17, wherein the adjustment mechanism comprises a first actuator having a first end engaged with the impression cylinder and a second end engaged to a mounting assembly connected to the frame structure, wherein the first actuator is operable to displace the impression cylinder relative to at least a second cylinder in the offset printing press and to control a contact pressure therebetween, the first actuator being selectively securable in a given position such that the distance between the first and second ends thereof remains fixed.
20. The offset printing press as defined in claim 19, further comprising a second actuator having a first end engaged to the mounting assembly and a second end engaged to the frame structure, the second actuator being operable to displace the mounting assembly between a first position, in which the impression cylinder is in the predetermined printing position, and a second position, wherein the impression

cylinder is in the disengaged position, whereby the second actuator is operable to selectively interrupt and restart printing without having to readjust the contact pressure.

21. The cylinder adjustment mechanism as defined in claim 20, wherein the impression cylinder is rotatably supported on at least one link member having a pivot axis radially spaced from a center of rotation of the cylinder, the first actuator being pivotably engaged to the at least one link member.
22. The offset printing press as defined in claim 18, wherein the adjustment mechanism comprises a first actuator having a first end engaged with the form roller and a second end engaged to a first end of a second actuator, the second actuator having a second end engaged to the frame structure, wherein the first actuator is operable to displace the form roller relative to at least a second cylinder in the offset printing press and to control a contact pressure therebetween, the first actuator being selectively securable in a given position such that the distance between the first and second ends thereof remains fixed, and wherein the second actuator is operable to displace the mounting assembly between a first position, in which the form roller is in the predetermined printing position, and a second position, wherein the form roller is in the disengaged position, such as to selectively interrupt and restart printing without having to readjust the contact pressure.